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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,287	07/18/2003	Rahul Saxena	P16855	4600

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EXAMINER	
HUSSAIN, TAUQIR	

ART UNIT	PAPER NUMBER
2452	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/622,287	SAXENA, RAHUL	
	Examiner	Art Unit	
	TAUQIR HUSSAIN	2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,7-19,21 and 23-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4-5, 7-19, 21 and 23-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/02/2009 has been entered.

Response to Amendment

2. This office action is in response to amendment /reconsideration filed on 04/02/2009, the amendment/reconsideration has been considered. Claims 1, 10 and 19 have been amended. Claims 1-2, 4-5, 7-19, 21 and 23-33 are pending for examination, the rejection cited as stated below.

Response to Arguments

3. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claim 4 and 21 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. The term "Substantially" in claim 14 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. There is no appropriate interpretation provided in specification for said term.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 2, 4, 5, 7-19, 21 and 23-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viswanath et al. (Patent Number: 6151322), hereinafter "Viswanath" in view of Malakapalli et al. (Patent. No.: US 6,467,060 B1), hereinafter "Malakapalli".

9. As to claim 1, Viswanath discloses, receiving electronic data from a first port of the data networking device (Viswanath, Abstract, lines 1-2);

discarding at least a portion of the electronic data prior to providing the electronic data to a memory of the networking device wherein the portion of electronic data deleted comprises a VLAN (virtual local area network) tag; (Abstract, lines 3-10, where striping the tag means discard the portion of the electronic data and Col.7, lines 10-13,

where VLAN tag is extracted means discarded and only VLAN ID is stored with frame in a memory);

providing at least a portion of the electronic data to a second port (Viswanath, Abstract, lines 16-20, where transmitting port is the second port).

generating a code and inserting the code into the frame prior to providing to the memory (Viswanath, Fig.4, Elements-84 and 64, Col.7, lines 21-39, where tagging can be interpret as coding and modifying means adding or deleting or inserting the appropriate information into frame and sending it to memory 64).

Determining a value of the VLAN tag to be inserted into the frame prior to providing to the second port (Viswanath, Col.6, lines 3-22, where VLAN tag is inserted before sending it to transmit to the second or output port).

Viswanath however is silent on disclosing generating CRC and inserting CRC into a frame or checking the CRC prior to providing to the second port.

Malakapalli however discloses, generating CRC and inserting CRC into a frame (Malakapalli, Col.17, lines 32-49, where CRC generator generates the first CRC and seed it in logical block addresses and Col.17, lines 50-65, Comparator compares the CRC before sending it to output port which is second port); and

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to combine the teachings of Viswanath with the teachings of Malakapalli in order to provide a system generating error detection and correction information for data is provided in which at least one data sector is received and an

Input/Output Error Detection and Correction checksum (IOEDC), a Cyclic Redundancy Code (CRC) and an ECC is generated from the at least one sector.

10. Claims 2, 4, 5, 10, 14 and 19, carry similar limitation as claim 1 above and therefore, are rejected under for same rationale.

11. As to claim 7, Viswanath and Malakapalli discloses the invention substantially as applied to claims 1, 2, 4 and 5 above, including, providing a portion of the electronic data to a control module prior to deleting a portion of the electronic data (Viswanath, Fig.4, Elements-84 and 64, Col.7, lines 17-21, where comparator 84 is control module, lines 32-33, where data is modified means deleting or adding header information and lines 37-39, where data is transferred to element-64, which is memory).

12. As to claim 8, Viswanath and Malakapalli discloses the invention substantially as in parent claim 7 above, including, wherein the portion of data provided to the control module comprises the protocol header (Viswanath, Fig.1a and 1b, Col.3, lines 31-33, Inherently protocol header is there, e.g. VLAN type, source address, destination address etc.).

13. As to claim 9, Viswanath and Malakapalli discloses the invention substantially as applied to claims 1, 2, 4, 5, 7 and 8 above, including, wherein the first port and the second port comprise a receive port and a transmit port, respectively (Viswanath, Col.7, lines 10, where receiving port could be first port and lines 42-44, where output port is transmit port).

14. As to claim 11, Viswanath and Malakapalli discloses the invention substantially as in parent claim 10 above, including, wherein the processor is further configured to modify the electronic data prior to providing at least a portion of the electronic data to one or more of the transmit ports (Viswanath, Col.7, lines 42-44, where out put port is transmit port and VLAN insertion means the data has been modified).

15. As to claim 12, Viswanath and Malakapalli discloses the invention substantially as in parent claim 1 above, including, wherein the apparatus comprises a network switch (Viswanath, Fig.2, Col.7, lines 10-11, where network switch means apparatus).

16. As to claim 13, Viswanath Viswanath and Malakapalli discloses the invention substantially as in parent claim 12 above, including, wherein said memory comprises network switch internal memory (Viswanath, Fig.4, Element-64 and 80).

17. As to claim 15, Viswanath and Malakapalli discloses the invention substantially as in parent claim 11 above, including, wherein modifying the electronic data comprises inserting a VLAN tag, wherein the VLAN tag relates at least in part to the destination address of the electronic data (Viswanath, Col.7, lines 42-44, where VLAN tag is inserted as a destination address).

18. As to claim 16, Viswanath and Malakapalli discloses the invention substantially as in parent claim 10 above, including, wherein the processor comprises a network processor (Viswanath, Fig.3b, Element-70, Col.6, lines 25-26, where network switch has

decision making engine which is processor and since switch is a network device therefore, processor is a network processor).

19. As to claim 17, Viswanath and Malakapalli discloses the invention substantially as in parent claim 10 above, including, wherein the memory comprises a plurality of memory devices (Viswanath, Fig.3b, and Elements-32, 64 and 66, Col.5, lines 50-51 and 56).

20. As to claim 18, Viswanath and Malakapalli discloses the invention substantially as in parent claim 17 above, including, wherein the plurality of memory devices comprise one or more of:

random access memory (Viswanath, Col.7, line 62) and

synchronous dynamic random access memory (Viswanath, Col.5, lines 7-9).

21. Claims 21, 23-26 are rejected for the same reasons as applied above to claims 5, 4, 6 and 15-18 respectively.

22. As to claim 27, Viswanath and Malakapalli discloses the invention substantially as in parent claim 19 above, including, wherein said processor is configured to modify said electronic data only if said second port is configured to recognize tags (Viswanath, Col.7, lines 10-13, where processor processes the tagged packets and lines 42-45, transmitted to VLAN ports which means there are out put ports configured to handle tagged packets).

23. As to claim 28, Viswanath and Malakapalli discloses disclose the invention substantially as in parent claim 1 above, including, further comprising, the processor is to generate a CRC of a non-discarded portion of the electronic data (Viswanath, Fig.4 Col.7, lines 10-29, where obviously destination tag is generated for the frame and not for the striped tag).

24. Claims 29-30 has same limitations as of claim 28 and therefore, are rejected for same rationale as applied to claim 28 above.

25. As to claim 30-33, Viswanath and Malakapalli discloses the invention substantially as in parent claims 1, 10 and 19, wherein the memory is internal to the network device (Viswanath, Fig.2, element-34, where SDRAM is the internal memory).

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Merchant et al. (Patent No.: US 6,680,945 B1)
- Williams et al. (Patent No.: US 7,031,325 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAUQIR HUSSAIN whose telephone number is (571)270-1247. The examiner can normally be reached on 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571 272 3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. H./
Examiner, Art Unit 2452

/Dohm Chankong/
Primary Examiner, Art Unit 2452